Maps Skills Design Document

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**Design Document**  
  
**I. Project Topic and Scope**   
 This lesson is for Fifth Grade Social Studies students. The goal for this lesson is for students to master the concepts of latitude and longitude and to describe locations using these map features.

**II. Target Audience and Context**   
Characteristics of Learners:  
 5th Grade students, both male and female, ages 9 to 11, and culturally diverse.   
Description of Learning Environment:  
 This lesson will take place in the schools computer lab which is equipped with 25 student computers. High speed internet access will be needed, as well as Adobe Flash Player and Google Earth.  
  
**III. Instructional Objectives**  
Overall Goal of Instruction:  
 The students will analyze line of longitude and latitude on a map or gird to determine points of location. The students will also be able to transfer these skills into real world situations.   
Specific Learning Objectives:  
 The learner will be able to:

* Use Cardinal Directions to describe a Location.
* Describe the Equator, International Dateline, and the Prime Meridian.
* Locate a position using lines of longitude and latitude.

**IV. Content and Media Objects**

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| **Module Title** | **Description** | **Media Objects** |
| 1. A Pirate’s Life For Me! | Present the Problem Scenario. | Video presenting the problem scenario. |
| 1. The Pirate Code | Vocabulary Overview of words related to map skills. | Video, images with descriptions, and Flash animations. |
| 1. Navigating Davey Jones Locker | Latitude and Longitude, equator, Prime Meridian, and International Dateline | Text and animations. |
| 1. X Marks the Spot | Pirate map with grid that students navigate through module to find the buried treasure. | Interactive animations that provide feedback to students as they identify various locations. |
| 1. Testing Your Sea Legs | Scenario- based, interactive assessment. | Google Earth to locate destinations, Map images and animations, Teacher created web based quiz. |

**V. Instructional Strategies**  
1. Introduction of modules through problem scenario: As you are walking along the beach on summer vacation, you discover a message in a bottle that has just washed ashore. You take the paper out, to find a treasure map! Suddenly, you are surrounded by pirates, who want that treasure! They never learned to read a map, so it is up to you to help them. If you don't, you will have to walk the plank!  
2. Activating learners prior knowledge through vocabulary review and preview (Spit-Attention and Pretraining Principle).   
3. Content is written in conversational style along with real world examples of how concepts are used (Personalization Principle and Supportive Information).   
4. Provide examples and practice opportunities: Identifying and Questioning exercises will be embedded in this module. They will be used to offer learners the opportunities to use latitude and longitude to describe locations on a map. If learners are unsuccessful at describing locations, explanations will be given.  
5. Scenario Based, Interactive Assessment: Learners will apply what they have learned by locating various points on Google Earth and answering questions concerning the locations, as well as some vocabulary covered in module 2.  
 **VI. Development and Production Plan**   
Week 1 (March 20-26): Design Document, Interface Design  
Week 2 (March 27- April 2): Modules 1&2  
Week 3 (April 3-9): Modules 3&4  
Week 4 (April 10-16): Module 5, assessment  
Week 5 (April 17-23): Refine Web Pages  
Week 6 (April 24-26): Presentation  
  
VII. References - APA style references